A Journal Devoted to Healthful Living

HEALTH

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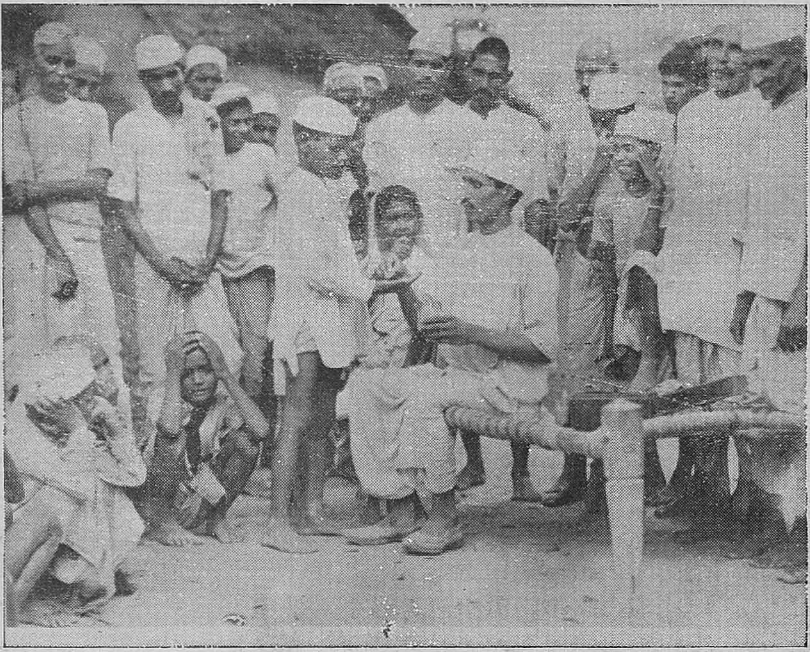
Editorial

Health Co-operative Societies for Villages

Elsewhere we publish a draft scheme proposed by the Government of Madras for running Health Co-operative Societies in villages. Suggestions and criticisms are invited and as we cannot be indifferent to a scheme like this which aims at the health and well-being of the masses in our Province, we feel inclined to offer a few remarks thereon.

Before we begin to discuss the merits and demerits of the Scheme, let us review the condition of " Rural Medical Relief" in India at the present day. We can boldly and incontrovertibly assert that nowhere in the world is Medical Relief so poor as in India. To cater to the medical needs of India's teeming millions, there are at a rough computation, 12,000 graduates of Indian Medical Colleges and 30,000 licentiates. It has been estimated that whereas in Great Britain, there is one registered doctor to every 1048 of the population, there is in India one recognized Medical man for every 9300 of the people. In Soviet Russia, which resembles India in its medical problem, both the countries being extensive in area and mainly agricultural in occupation, there is one doctor for 1709 people. The figures for India tell their own awful and alarming tale. The position is best described by Major General Cuthbert Sprawson, C.I.E., I.M.S., Director-General of Indian Medical Service (Retd.) and for some time also Surgeon-General with the Government of Madras, in an address he made recently in London, in these words:—"Here we come to the primary question

whether India should consider it her duty or her aim to provide free medical attendance for all her sick poor. In Great Britain, that has long been the case and apart from Health Insurance Schemes, the Poor Law of England allows and I believe now efficiently provides free attendance for all who cannot afford a doctor. I have never heard it authoritatively stated whether India assumes a similar responsibility or not; presumably she does not, though it may be admitted that the aim is a desirable one. In any case, it is impracticable in the near future, except in a very partial degree. The majority of the population probably never see a doctor at all and that is chiefly owing to inaccessibility of proper medical aid." Medical men crowd themselves in cities and towns and though they cannot earn a living of the standard they have a right to expect, after their long period of training, they do not suffer from actual starvation. In rural parts, there is demand for more medical men. But unfortunately, very few men offer their services as village life is not paying and attractive. There are, besides, social disadvantages; the medical man in a village feels himself isolated and finds it difficult to educate his children properly in a village school. A bold attempt however, was made fifteen years ago, by the dyarchic Government of Madras, to subsidize medical practitioners and make them practise in villages. They should treat thirty patients daily free and could also charge fees for paying patients. The system is working well so far and we have also the testimony of Major-General Sprawson to the effect that "the system works well enough in the Madras Presidency, where there are about 500 such subsidized practitioners and I fail to see why it should not work in other parts." The Dispensaries so far established work out at an average of 33 per annum and it is indeed a poor record for the Dyarchic Ministry with enough surplus funds at the disposal of the then



Distribution of Quinine to Villagers to rid them from the ravages of Malaria.

Government, when compared to 75 village hospitals and 150 midwives provided during the short space of 20 months by the Congress Ministry now in office, with depleted finance. Not satisfied with this, the Health Ministry has brought the present Scheme which may be said to be on all fours with the Health Insurance Scheme of England.

In the rural parts, there are two classes of people to be dealt with-agricultural land-owners and landless agricultural labourers. The former are either rich mirasdars or lowly pattadars who pay, besides annual kist to Government, some contribution to the Local Boards for Roads, Medical and Public Health services and other amenities. These cesses are being collected from the time of Lord Ripon unto to the present day but there are still many villages, which have no water to drink, no roads to travel by and no dispensaries to heal ailments.

The Local Boards are unable to manage a vast area like a district with limited finance. It will take a very long time for village panchayats to come into being in all the villages and people in village parts cannot continue to suffer any longer. Prompted by philanthropic motives, the Congress Ministry in our Province have come out with a laudable scheme, by which the villagers can get, by self-help and self-reliance, scientific medical aid, at a minimum cost. This, in short, is the object of the Health Co-operative Scheme. As in the Co-operative Credit Societies, co-operators get loans at a cheap rate of interest payable in easy instalments, so also in Health Co-operative Societies, Health co-operators get the services of a medical man for As. 2/- a month and medicines at a cheap cost. In an extreme case, if the patient is too ill to be taken to the dispensary, the doctor can be called in for a very low payment of As. 4/- per visit. The Health Societies are established on the model of the Health Insurance Scheme in Great Britain and the rates are fixed so low as to be within the means of the poor agriculturists of our Province. The initial expenses are being met by Government and Local Boards.

We have, however, one or two observations to make. First of all, instead of a flat rate of As. 2/- per head per mensem, we would suggest a graded scale, say 1 anna per head for all pattadars paying an annual kist of Rs. 10, and below; As. 2 for those paying above Rs. 10 and below Rs. 30; As. 3 for those paying above Rs. 30 and below Rs. 50; and As. 4 for all others. As it is, the richest mirasdar in a village is made to pay the same amount as the poorest 1 acre land holder, which is really hard on the latter.

Secondly, there is no provision made for the employment of a midwife. This is a great desideratum and will be of immense advantage to villagers, as it will help reduce maternal and infantile mortality rate, considerably.

Thirdly, the poor landless labourers have been left in the lurch. These should be treated free. If they are labourers or tenants permanently employed by a land-lord, he must be made to pay for their medical treatment in the same way as the factory owner provides for the medical treatment of his workmen under the Factory Act. If the labourers are unattached wage-earners, they must

get free treatment in the same way as in the Rural Dispensaries, patients under Rs. 30 income are treated free. Some such provision must be made in this scheme and the cost may be met from contributions by Local Boards.

Fourthly, the amount should be collected annually instead of monthly along with the kist, as otherwise, there will be lapses and the medical establishments will have to suffer from delayed payment of salaries or no payment at all.

As the economic conditions of the villagers are now improving by means of the ameliorative measures that are being introduced by the Congress Ministry, such as Prohibition, Debt Relief, &c., this trifling sum of As. 2 per month will not prove a heavy burden on the people.

We, therefore, heartily commend the scheme to the public and wish it all success.

The Road to Manhood and Oldage

By

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TRIVANDRUM.

NOBODY wants to get old—if he can help it. And nobody can keep young for ever. King Solomon had the choice between wisdom and oldage; but for common mortals, there is no short cut to wisdom except through the inescapable humdrum routine of experience of a full life of manhood. To a certain extent oldage has been made endurable, by the mitigation of some of the horrors of senility, through the modern cosmetics, dentistry, the spectacles, and other accessories or substitutes. We have no idea of what old Methusaleh looked like on his 969th birthday. And as regards the attributes of respectability and wisdom, that is claimed as an inalienable privilege by the grey-haired rascal as much as by the recluse. There being no other alternative, the contingency of age has therefore to be planned for, as we plan for the child, with a view ultimately to harnessing the effective man-power of a people for the service of the nation.

India—A Nation of Adolescents.—Unfortunately for India, the majority of us drop off very soon after we have started on the road to life. Many get knocked over, being in the way of the rushing traffic; and the progress of the sturdy ones is perforce handicapped considerably by having to halt and carry the lame and the feeble with them. Manhood diluted with the inert bulk of imbecility is absolutely unfit for concentrated action against powers with picked human materials. It is a startling fact that most of us do not live to see our twenty-fifth birthday. We are not endowed with sufficient stamina to 'deliver the goods" at their wonted destination. The average

duration of effective manhood in India is thus reduced to about five years, as compared with that of virile nations elsewhere who enjoy a manhood of forty years. Manhood is the sinew with which a nation is to be built for peace as for war; wealth is what manhood can produce when rigidly equipped and directed. It follows therefore that we in India get out of our half-baked manhood barely an eighth of the service that other nations are able to give their fatherlands. A community of adolescents has little chance when pitched against the fully organized man-power of modern nations. The backward peoples are looked upon as the rightful property for the exploitation of the more virile nations —when they are not reclaimed and cared for by the owners. If we would not go abreast with others we certainly deserve to go under. In the all too brief span of five years of manhood, the Indian has to acquire knowledge, marry and become a '*Grahasta*' and bring up children, store experience and wisdom as a citizen and impart it to posterity, and serve his king and country. The serious problem is how to prolong this lamentably brief period of manhood for the average Indian.

Senora Martina De-la-rosa born in Mexico. 129 years old in 1933.

Body and Soul in Danger.—It has been said that oldage is for those with a sound body and "a good conscience." If conscience is an elusive proposition, the body is not. Both body and soul, however, seem in danger of deterioration through intensely self-seeking and obsolete social and economic ideals, raising the standards of luxury for the refined few, and overlooking the wants of the rustic millions. We have still with us the retrograde species of "conscientious objector" who would not yield a shred of his personal comforts in favour of the "communal conscience", the very basis of all national welfare. The prospect of another eighty million mouths to feed, coming to fill the next census does not inspire any cheery outlook even in the economist optimist who would invite yet another hundred millions (almost the population of

France) by the year 1951 A.D., for the banquet of misery, on the strength of the vast areas of India and Burma. It is not cereals alone that build up a modern nation. The entire standard of life has to be improved in a variety of ways, of which the raising of the general level of mass education is a very important item, along with others none the less urgent, such as the care of the public health, including questions of housing, unemployment and sickness allowances, and general economic security. Supplies for the social services and for defence cannot be gathered out of the land, with weakening working capacity. Civilized man insists on an average means of culture that ensures a healthful living, over and above the bare means of subsistence that satisfies the animal. And culture of the masses by no means keeps pace with the rate of increase of population in India.

Forces Favouring Premature Decay.—*Heredity* :—Human efficiency is impaired, and a seasoned oldage frustrated, by various causes, social and economical. A good heredity should be regarded as a capital asset of a community ; and a bad heredity calls for sacrifice from individuals or their guardians in the name of the nation and of humanity. It should be made a crime to burden the community with its idiots and its lunatics wedded to reproduce their kind. As we reject the poorer seeds and seedlings for the plant that is to yield the best crop, so have we to reject, as unfit for reproduction, and prohibit the marriage of, persons mentally and phycally incompetent, as also those with irremediable constitutional taints. Incurable contagious disease discovered within marital life unquestionably demands some form of contraception in the larger interests of the race. Continence is for the saint. There can be no sin in disappointing a few millions of superfluous sperms or ova that are not fertilized individuals yet. Nature does not intend that every pollen grain of the plant and every sperm in the animal should fertilize an ovum and grow into an individual. Were it so, man himself would have been long ago swept out of the face of the earth by the myriads of sperm elements prowling about in the animal creation. It is strange to behold those who hold a brief for the invisible and unformed elements, while they look on the extermination of millions of adult brethren by war and through famine.

Early Marriage.—Premature marriage is another potent cause of race deterioration, of which early death is a symptom. How can immature parents produce mature babies for the motherland ? Instead of shielding from sex-distractions, early marriage of the under-developed prematurely forces the sexual instinct in the innocent '*bramacharins*' placed uncomfortably between their newly awakened impulses and the pious injunction to curb them until formally sanctioned. Fortunately for us, the social reform struggle has received strong reinforcements from unexpected quarters—from the fair, but none the less heroic, sex. Our modern Sithas are now in the fore-front of the fight, instead of devoting all their commandeered attention to the services of the fastidious and pampered Ramas of the old world.

The Economics of Longevity.—Economic insecurity is another cause of early decay. Man is happiest when he works his way independently through life rather than when he is kept idle on doles. A sufficiency of food, properly balanced, is of course indispensable for long life. The balancing of the diet of the ryots with proteins and fats has not entered the calculations of theorists who are obsessed with the potential plenty of cereals in a doubtful future, when the present scarcity fails altogether to meet existing demands. The recent impetus for scientific food production, organized by Government, is a move of the utmost importance. Statistics can 'white-wash' and make the dark appear bright: but the phenomenal rush to the hospitals through lack of essential nutrition and comfort tells its own tale.

Adequate rest and holidays after work and during sickness and convalescence come in importance after food. Working when one is fatigued or half-sick and hardly recovered from disease, can easily bring on the dread tuberculosis now sought to be treated as an isolated problem, instead of as a consequential one. Holidays with pay, sickness-allowances and pensions, contribute towards a healthier nation. All this would mean more of able workers and less of the incapables. Aim at quality rather than quantity. Let us be honest and confess that we have failed to make adequate provision for the wants of the present population of India. If economics tries to apply the brake on reproduction, bigotry intervenes, and ignoring realities, gives the loose rein on multiplication. But reason cannot permit itself to be thwarted any longer by emotionalism, from the compelling logic of new facts established by science and the bad experience of health workers.

Realism *versus* **Emotionalism.**—The play of emotionalism and fatalism has submerged realism. We have ceased to be out-and-out fatalists once we have decided to fight for our rights, even with that subtle weapon of 'soul-force'. It is idle to talk of arming ourselves spiritually when the physique vouchsafed to us is just the bare minimum that manages to hold the soul to the body. Spiritual excellence requires physical fitness also to back it. The spirit cannot fight or exist apart from the body. Weaklings on 'short-commons' and short-lived adolescents cannot muster sufficient 'soul-force' that can develop only out of powers restrained but not crushed. The country calls for mature manhood and womanhood to sustain her traditional and spiritual strength.

The health of the individual is not all our problem; this is only the means to the supreme end of communal and national welfare. The corporate spirit is essential in social as in political affairs. A system of education stimulating corporate action aiming at social welfare seems the most pressing need of the day.

The road to ripe oldage in India is infested with insidious perils in ambush rendering the journey hazardous at every turn. It is futile to talk of 'nation-building' when our flower of manhood is suffered to be nipped in the bud by corrupting cankers corroding the heart of society. Manhood and oldage can certainly be made more worthy if we but will it, and are prepared to make some sacrifice of our squeamish sentiments for the sake of the supreme national cause.

LEPROSY Its History, Modes of Transmission & Prophylaxis

By Dr. Joseph S. Khan, L.C.P.S.,

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History.—The original home of Leprosy has been traced by various writers. Some say that it was in Asia, while others say that it was in Africa. The earliest accounts go as far as 1350 B.C., from Egypt, introduced there by negro slaves from Saudan, and from India. The Vedas give its existence in India about 1400 B.C. From time immemorial, this disease was considered loathsome and a leper in the Old Testament time had to quit his home, kinsmen, and community and live away from others. Leprosy is a disease of semi-civilised and the savages, the highly civilised being exempt from it.

A LEPER.

Modes of Transmission. - (1) *Contagion*:—The modern accepted theory is that the disease is transmitted from one person to another by direct contact. Infectious lepers are sometimes hard to recognize, and they pass in the community as healthy persons while they spread the infection to contacts. The contacts show no sign of the disease till several years, as the incubation period of the disease is unknown. There is ample evidence to support the hypothesis, that the important mode of transmission of the disease is by close contact. "The closer and more prolonged the contact, the more infectious the leper, the more likely is the disease to be acquired". (Muir).

2. *Wounds and abrasions of the skin or mucous membrane* :— There is considerable evidence that the lepra bacilli (germs), enter through wounds and abrasions of the skin and mucous membrane. The picking of the nose, or scratching of the skin, irritated by insect-bites, are possible aids to infection. The statement some writers make, that leprosy is acquired by eating infected food, or bathing in tanks infected by lepers, or even by drinking water from the infected

wells, has no reality in the eyes of the modern workers. There is also no proof to support that the disease is inoculated by bites of insects like flies, bugs, lice and ticks, but they may act as carriers, as some workers have found that they harbour leprosy bacilli.

3. Some cases have been reported where leprosy was aquired by wearing the clothes or sleeping on beds, of lepers. It has been observed that leprosy bacilli, remain alive for sometime after leaving the host, but their vitality is much diminished.

4. It is to be remembered that all lepers are not infectious. The Lepromatous type (formerly termed cutaneous, or skin type), in which the skin is infiltrated (diseased), are the patients who are very dangerous to the public. Numerous germs are sometimes found on superficial scrapings of the skin. The nasal discharge and droplets, when the patient sneezes or talks, may be found saturated with germs.

5. *Resistance of the infectee* :—The lower the resistance of the person exposed, the greater the liability to get the disease. In children the resistance is low; and hence there is more likelihood of their getting the disease. When the resistance in adults and children is reduced by accompanying diseases, unhealthy living, poor nourishment, and the strain of puberty and child bearing, the chances to contract the disease are more than they would be otherwise.

6. Lack of personal hygiene and insanitary surroundings contribute a lot towards the spread of disease. Room and specially bed contacts are very dangerous and constitute an important mode of transmission.

Prophylaxis.—The facts that infectious lepers roam in the street, and pass sometimes undetected, and that nothing specific is yet known in the way of treatment, should make prophylaxis all the more important. I have made it clear that close personal contact is the usual way of the transmission of the disease, and hence the first essential in prophylaxis would be to remove infectious cases from close contact with the healthy and specially, children and weak adults. It is a pity that the present "Leper Act", of India is rather defective, since it does not enforce rigid segregations of lepers who are a real danger to community. Lepers should not be allowed to beg in the streets or handle food and cloathing or work as public or domestic servants. They should not be allowed to travel in public conveyances. Public co-operation and education is essential to take any successful step to prevent this loathsome disease. The Public should discourage alms-giving to lepers, but encourage them to go to Leper colonies or Asylums, which may be made places of attraction to these suffering patients. This alms-giving has attracted more lepers to Calcutta who go on begging all the day, than to any other big city in India! Those who come in contact with lepers like doctors, nurses, and compounders, and other workers, should have good nourshing food, and take plenty of exercise.

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MODERN SCIENCE AND HINDU SASTRAS

BY K. VISWANATHAN, B. SC.,

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UNDER this heading, I propose to explain some points in our Sastras which are often denounced as meaningless rubbish, antiquated and out of date. Modern science and sastras do not differ. I shall take a few items each month and try to show that modern science and sastras teach the same thing. Some injunctions go under *achara* or custom and some under sastraic rule. Sastras enjoin Hindus to get up from bed before dawn and finish their ablutions before the sun rises. Some of the popular superstitions even have some scientific basis. Leaving aside the spiritual side of the mantras, getting up early is productive of good health. "Early to bed and early to rise makes a man healthy, wealthy and wise." is an adage in the English language. It is based on a study of the human mechanism. The early morning atmosphere is clear and pure and tones up the shattered nerves, the sleep having done its work in recuperating the used-up tissues. Breathing the pure air then strengthens the lungs. Going out for bath and ablutions gives the necessary exercise to the body. Calls of nature have to be answered in the open away from the village dwellings. How sanitary is this injunction! (The sun will destroy the refuse and good manure is made of it. Soil deficiency too is made up thereby).

The air over the river or pond contains ozone, which is proclaimed by modern science to be very good. For building up nerves and repairing shattered ones, natural methods are the best. Drugging is always bad. All the advertised goods for nerves are nothing. Baths are the best remedy for debilitated or shattered nerves.

Cold water improves the nerves. A bath early morning in a stream or pond tones up the system wonderfully as nothing else can. The water then is not ice-cold too. A little before dawn is the proper time according to the sastras; the ozone-carrying gases are believed to evolve out of the water during the night and settle on the surface of the pond or river; this goes away when the sun rises or shines. Our ancients must have been acquainted with these—whether they found it intuitively or by laboratory experiments is beside the point. Bath in the water-falls wonderfully tones up the nervous system. Hence pilgrimages to holy rivers were ordained. The biking (there were no railways then) and the bath in the waterfalls tone the most shattered of nerves. Even sick persons were ordained to

go on pilgrimage. The object was health first.

After the bath and sandhya *Surya-namaskaras* were ordained. Before the sun rises the atmosphere is full of the invisible radiations like the violet and ultra-violet rays etc. Modern science has proved that these have very beneficial effects on the body. Uttering the mantras loudly increases the lung capacity and any nasal defect can be remedied a little thereby. The namaskaras are good as muscular exercise. Thus our ancients, under cloak of religion, gave sound rules of hygiene and methods of developing the body; or they combined religion and science in one rule.

Modern Science has so far advanced that people are playing bridge in water on a good hot summer day. The table tops are strapped to the inner tube of auto tyres and the players floating with them in the water.

Natural and Artificial Health.

"There are two kinds of health, natural and artificial. Medicine has given man artificial health--medical examination and care are troublesome, costly, and often ineffectual—the growing dissatisfaction of the public with the medical profession is, in some measure, due to this evil. Medicine, instead of being content with masking organic diseases, must endeavour to prevent or cure them........"—*Dr. Alex Carrel.*

SOYA-BEANS

By

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Synonyms.—Glycini Hispida, Chinese cowpea.

General History and Characteristics.—Soya bean is one of the most important agricultural plants of Northern China and Japan. It is classed among the leguminous plants. The seeds are shaped like ordinary peas, but they can be easily distinguished from them. Majority of yellow seeded Soya beans show five or six closely set tiny wrinkles on the skin. No other beans or peas have such a mark. If the Soya beans are soaked in water they elongate, while the peas and beans retain their original shape.

Habitat.—The plant is indigenous to Manchuria where Soya bean forms a staple article of diet from time immemorial. The Manchurian peasantry are well aware of this amazing little plant and make a drink from it in a rough and ready fashion by mashing it up with a pestle and mortar and infusing it with hot water. The resulting liquid resembles milk, not only in appearance, but possesses nutritive properties similar to those of milk, when ingested. It is a recognised fact that Manchurians, both adults and infants, thrive well upon it.

Plant Characteristics.—It grows on a small weak-stemmed plant of the same type as a dwarf garden pea. The plant carries four or five stalks having large, broad, trifoliate leaves. The *leaves* are ovate, having palmate venation, and are three inches long and two inches broad. It bears tiny white *flowers* and pods $\frac{3}{4}$ inch long and $\frac{1}{2}$ inch broad containing three or more seeds. The dry seeds are yellow and oval with the hilum flattened, and they possess a thin greyish coloured tight-fitting skin through which the yellow colour of the cotyledon is seen. On account of this skin the seeds can be stored and are well preserved indefinitely from contamination, and transported easily. The seed contains aleurone granules mostly and some oil globules, and no starch granules. The seeds are 3/8 inch long and $\frac{1}{4}$ inch broad when fresh. It takes more than 2 months to bear seeds. The plant is not a creeper and has no tendrils.

Chemistry.—Soya bean is rich in Potash, Lime, and Vitamins, is well suited for encouraging growth and maintaining the tissues in a state of health. It contains more protein than any grain or pulse seed known so far. It has as much as forty per cent proteins *i.e.* 2 times more than in pulses and beans, 3 times more than in wheat, and 5 times more than in rice. Its proteins are of high biological value as they contain all the important Amino-Acids, particularly, Glycine, Trypto-phane, and Lycine. In fact, the protein of Soyabean is similar to that found in cow's milk

and animal foods. Its high protein content makes it a rich body-buliding food especially for the formation of muscles and nerves. It is a boon to the vegetarians as its protein resembles animal protein.

Soyabean oil contains a large amount of Lecithin and Vitamins A and D, and in this respect it resembles butter. Lecithin of Soyabean is identical with that of yolk of eggs.

The mineral salts in Soyabeans are far more than in many other seeds and they consist mostly of phosphates and calcium.

Soyabeans are very important in the dietary of Diabetic patients, on account of their low starchy content (only 24 %).

Advantages over Lentils.—Amongst Hindus, especially Vegetarians, the introduction of Soyabean in place of lentils has great advantages. As lentils are hard to digest, they cannot be taken in sufficiently large quantities. Secondly, the protein found in lentils is not completely assimilable as in milk, so a part of it undergoes putrefaction. Thirdly, lentils contain purin bodies, though less than in meat and are hence objectionable. Lastly, lentils contain much starch whereas Soyabean contains only a little, hence Soyabean is more suitable than lentils to go with a rice diet which is nearly all starch.

Advantages over Meat.—In a hot country like India one needs less food, particularly less meat, and among the well-to-do who take a large amount of meat, the introduction of Soyabean to replace a part of meat would diminish the ill-effects of too much meat.

1. The protein introduced into the body in the form of meat, leaves more residue than the protein derived from plants, and this causes augmentation of the viscosity of blood resulting in arterio-sclerosis.

2. Secondly, meat produces undue putrefaction of protein in the intestines. The absorption of products of putrefaction into the system also causes arterio-sclerosis, the disease which destroys more life than any other disease after the age of 45 and is the chief cause of premature senility.

3. Thirdly, as protein derived from meat contains more purin bodies than vegetable protein, excessive meat diet causes gout and kidney diseases.

4. Lastly, a meat diet, instead of increasing one's endurance as it has been shown recently, like alcohol, actually reduces it.

Superiority over Milk.—1. Milk is costly and is not available to many (due to poverty).

2. Milk can never be obtained germ-free, hence it is not safe unless it is pasteurized. Cow's milk may produce summer diarrhœa and Tuberculosis among children if not properly pasteurized.

3. The quantity of milk required to make the diet efficient contains a large amount of water which puts a strain on the kidneys, and hence it is not advisable to use milk in a large quantity for any length of time. This is why milk, though considered an ideal food for infants is not so for adults. Soyabean suits all ages.

It is an established fact that diets of both the well-to-do and the poor are not ideal and scientific, as the former contains too much protein and the latter too little—a result of

unequal distribution of the necessities of life, one over-loading and the other starving—both being physiologically and morally unsound and unjustified—the curse specially current in India. Soyabean is a God-sent gift which can be used by the rich and the poor alike; hence, it is called the 'Poor man's Milk and Meat'.

Season.—It can be sown both as a 'Kharif' (Rainy season) crop or as a 'Rabi' (winter season) one. Kharif sowing should be done after three or four showers of monsoon rain. Rabi cultivation may require one or two irrigations.

Rainfall.—It is grown in places having average annual rainfall ranging from 10 to 40 inches according to the heaviness of the soil. A heavy soil requires less rain while a lighter one requires more.

Soil.—Soyabean succeeds in nearly all types of soil. It is especially adapted to the cotton and corn belts in America; and we may, therefore, look forward to an equally promising result in Gujart, Sind, etc. It does best on black-soil. The black-seeded fodder variety can withstand water logging to some extent, while the yellow seeded varieties are susceptible to it.

Cultivation.—Soyabean does not require any special cultivation, but care should be taken to avoid deep ploughing or coarse seed-bed. The land may be prepared as for maize. It pays the farmer to cultivate his land very thoroughly and make a fine seed-bed for Soyabean. The land should be ploughed as soon as possible after the harvesting of Rabi crops. It should then be ploughed off and on till sowing time to destroy weeds. There should be enough moisture in the soil at sowing time.

Manuring.—A marvellous feature of this plant is its nature to improve the soil, as it draws nitrogen from the air and not from the soil. Within a short period of 100 days, it extracts very little from the soil and stores up extraordinary quantity of proteins, fat and minerals. It responds well to moderate manuring; very heavy doses are without remuneration. In soils which are very sandy or poor in fertility, artificial manures may be applied. Stable manure or in its place bone manure, ashes and Mureate of Potash may be used. The stable manure may be applied as much as used for other crops but the other manures should be applied in the following quantities:—

Acid Phosphate (Bone manure)—
about 3 maunds per Acre.

Wood ashes about 2½ maunds
per Acre.

Where wood ashes are difficult to obtain, 12 seers of Mureate of Potash may be applied in its place. Where none of these two is available only bone manure may be used. Slaked lime is also useful for Soyabean but not so much as for lucerne.

(To be continued.)

Fasting

"During the fast, my mind was extraordinarily clear and active. And especially sensitive to impressions."

—*P. B. Ballard in "Things I Cannot Forget."*

VIRTUES OF NIMBA

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NIMBA or Neem is a very common tree and is distributed all over India. It grows to a height of 18 to 30 feet, but larger specimens are not uncommon. In the Bombay Presidency, it is called Bala-Nimba which in Bengal is called Ghora-Neem. In Tamil, it is called Vembu and in Telegu, the nomenclature is Vapachetta. The tree belongs to the natural order Melia Azadirachta.

The therapeutic properties of Neem are so much prized by the Hindus that religious sanctity has been ascribed to the tree to make sufficient impression on the people about the plant and prevent its wanton destruction. The presence of the tree in close proximity to a dwelling house acts as a natural prophylactic against diseases and the air that floats over the Nimba tree is considered very healthy and invigorating. Patients suffering from Tuberculosis have been advised to live in thatched huts 'Parna kuteer' in forests where Shala (Shorea Robusta, the well known timber tree) or Neem abound. To afford additional protection against wanton destruction, the Hindus, in addition to the sanctity ascribed to the tree, have described it as the favourite dwelling place of certain class of spirits or ghosts.

Almost every part of this important plant is used for medicinal purposes. The bark contains a bitter resin which is easily extracted and is tonic, astringent and anthelmintic. The seeds are fairly rich in oil which contains appreciable quantities of sulphur and various proportions of stearic, oleic, bituric and valetic acids and has germicidal properties of sufficient efficiency. The Neem oil, therefore, as well as the decoction of Neem leaves, is particularly useful in scabies, ulcers, dermatitis, acne-rosacea, eczema, intertrigo,lupus, Paget's disease, Seborrhœa and various other diseases of the skin. Soaps made of Neem oil has a fair demand in the market, though the utility of a soap containing germicides is not well established. The germicidal properties of the soap itself are more responsible for the reputation of germicidal soaps than the germicides that the soap may contain. The fatty acids found in the Neem oil were first recognised in modern times by Dr. Warden; and Mr. Prebble established that the inner bark easily yields a sulphur compound. The Neem leaves also possess properties similar to the oil though to a lesser degree for the leaves contain some oil. Powdered leaves passed through muslin and mixed with cow-dung ashes freshly obtained, is dusted with advantage on the small-pox papulae. The patient's bed may with advantage be covered with a layer of tender leaves which should be changed every day. Neem leaves are very much recommended for internal use as an article of diet during any epidemic specially when smallpox cases are in evidence. For this purpose very young leaves, which are not so bitter as the fully

grown ones, are gathered and fried in ghee or any edible oil. What the Boracic Acid is to the Allopaths the Neem decoction is to the Kavirajes. It comes very handy and was freely used when the vaids practised surgery. Pastes made of the leaves in water cures scabies within a few days. Some turmeric may be added to this paste with great advantage. The vegetable oil or ghee in which the bark, fruit or leaves have been fried is an excellent ointment. Half a tola of the juice of the Neem leaves with a little honey gives satisfactory results as an anthelmintic. Half a tola of the bark or leaves and half a total of Patol leaves (Tricosanthes Dioica) boiled in half a seer of water down to one eighth seer are useful in the primary stage of leprosy. In advanced cases the patient may be directed to take his bath in the above decoction and ointment of Neem and turmeric recommended for local application. To prepare ointment of Neem, fry some leaves in a small quantity of cow ghee. When the leaves are sufficiently crisp and black, grind down to a paste. Equal parts of Neem leaves, bark, root, fruit, flower and seed, powdered together and used in $\frac{1}{4}$ or $\frac{1}{2}$ a tola dose acts as a febrifuge. It will protect the teeth also by preventing their invasion from various kinds of germs by using its twig as 'Dantan'. Thus it will be seen that the Neem is a very useful plant and it very well deserves the sanctity attributed to it, being a very highly useful tree.

MASSAGE

By

M. ARUNACHALAM.

MODERN therapeutic methods very largely include the use of massage; and though it may seem that massage is not an exercise, it has some of the characteristics of exercise. Properly applied massage, combined with passive movements of the joints-that is, movements, made by the masseur may be invaluable in many forms of illness. Joints are meant to move; and therefore, according to a universal law of life, if they be not moved, they stiffen. In cases of fracture, or confinement to bed for any reason, massage and passive movements are often invaluable in preserving the health of the joints; and the average stay of patients in bed, under various disease-headings, has been much shortened in recent times by the full appreciation of the place of massage and passive movements in therapeutics. Further, there are many kinds of illness, such as nervous exhaustion, sleeplessness, rheumatism, paralysis and so forth, where the ordinary employment of exercise is out of the question because the nerve cells which normally order the muscles are tired and require rest. Yet there is nothing the matter with the muscles themselves nor with the joints; and if the nerves are to rest, the muscles and the joints will certainly suffer from having rest enforced on them. Here massage and passive movements come to rescue. The muscles and joints are stretched and bent from without, while the patient's tired nerve cells continue to rest, and the massage keeps going the circulation of lymph through the muscles, almost as well as if they were being squeezed by their own normal contractions.

These are the methods, with the reasoning that underlies them, which are so largely replacing drugs and stimulants in the modern treatment of disease.

HEALTH CO-OPERATIVE SOCIETIES FOR VILLAGES

MADRAS GOVERNMENT'S DRAFT SCHEME

THE following is the draft scheme for running Health Co-operative Societies in villages:—

It is said, "Health is Wealth." This is certainly true. Good health enables the villager to devote more time to his agricultural operations so as to increase production and augment his income. Bad health does the reverse. If a ryot and his people at home are in good health, they will be happy, they will also manage their agricultural operations more efficiently and this will result in economic gain. Consequently in so far as the health of the agricultural population tends to increase the efficiency of labour, all activities directed towards keeping up the efficiency of labour will constitute economic activities and will come under the scope of the Co-operative Societies Act.

People's Responsibility.—Generally, no qualified doctor thinks of setting up practice in a village, with the result that the villagers have to depend on quacks for treatment of diseases. Sanitation and hygiene are generally poor in villages and when epidemics come, the misery and squalor in villages are appalling. In 40,000 villages in the Presidency, there are no village panchayats and the people in those villages have to suffer for want of proper medical aid. It is no doubt the duty of the State and the local bodies to provide facilities for medical help, but it is not possible for them to do so in all the villages. So the people themselves should come to the aid of the State. They should not look to the State to do everything for them. They should be ready to bear a portion of the burden themselves. Moreover, schemes run by the State, cannot continue unless the people themselves associate themselves in their work. Generally, they continue to function until the Government finances them but when the finance is withdrawn, they collapse and Government cannot be financing them for ever. It is necessary, therefore, that the people should shoulder the work and finances of rural medical aid to some extent. The best agency for it is, therefore, a Health Co-operative Society.

Objects of Health Societies.—Like all Co-operative Societies, the Health Societies are associations of persons, directly interested in the undertaking and sharing in its management with equal rights and obligations. Their by-laws, laying down the duties and responsibilities of the Managing Committee, General Body, etc., are similar to those of other Co-operative Societies. The main objects of these Societies are:—

1. The organisation of a medical establishment with a qualified medical offficer, compounder, and dispensary ; each member paying an annual subscription in cash or in kind of equivalent value towards the expenses.

2. To carry out sanitation and preventive work with the help of organised squads of the young men of the village—such as the filling up of stagnant pools, laying down approach roads, sinking of tube wells, providing bored hole latrines, etc.

The funds required to run such Societies will be derived from annual subscriptions from members, grants from Government and District Boards, contributions from out of the Common Good Fund of Central Banks and Societies and fees collected from members for doctor's visit to houses.

It is proposed to start eight Societies in the Presidency, as an experimental measure, four in the North and four in the South, in the Districts of East and West Godavari, Trichinopoly, Tanjore and Ramnad. One Society will be formed for a group of villages : a tentative list showing the places where it is proposed to start Health Societies is enclosed. Each of the groups chosen comprises about 1,000 to 2,000 families and it may reasonably be expected that at least 500 persons representing 500 families will join the Society. Each member will have to pay an annual subscription of Re. 1-8-0 (0-2-0 per month) payable in cash or in kind or in labour. The subscriptions may be increased after Societies have functioned for some time. Members will be given medicine at cost prices. Members will receive medical advice at the dispensary free of charge. They should, however, pay a small fee—say, annas four (0-4-0) per call for the services of the doctor at houses. The income from this source will be credited to the funds of the Society.

Question of Finance.—The approximate cost—capital and recurring—of a Health Co-operative Society will be as follows :—

Capital Expenditure :—1. Cost of the dispensary building, Rs. 250 ;

2. Cost of quarters for the Doctor and compounder, Rs. 400.

3. Furniture, Rs. 60.

4. One cycle Rs. 40.

5. Office equipment, Rs. 50.

6. Initial stock of medicine and surgical instruments, Rs. 200. Total Rs. 1,000.

Recurring Expenditure :—1. Doctor's salary at Rs. 50 per month —Rs. 600.

2. Compounder's salary at Rs. 15 per month—Rs. 180.

3. Servant and sweeper at Rs. 5 per month—Rs. 60.

4. Contingencies at Rs. 5 per month—Rs. 60. Total Rs. 900.

Income :—1. Annual subscription (at 2 annas per month), Rs. 750.

2. Income from call fees, injection fees, etc., the average per month being taken to be 15 calls and 15 injections (15 x 4 as. plus 15 x 8 as.), Rs. 150. Total Rs. 900.

It may be observed from the above statement that the initial capital expenditure comes to about Rs. 1,000 and unless this sum is found, it is not possible to start a Health Society. The help of an outside agency, (Government or District Board or Co-operative banks which can contribute from out of the Common Good Fund) is necessary to meet these non-recurring items as the Society should not be left to depend for financial help on private benefactions alone. The Madras Provincial Co-operative Bank, several central banks, urban banks and Co-operative societies have large amounts to the credit of their Common Good Fund and they may be induced to contribute substantial sums to meet

the capital expenditure. If, however, the response from the co-operative institutions is not adequate, the help of Government or District Board may be necessary. Out of 15 lakhs allotted to the Madras Government 12.25 lakhs have been given to Collectors for rural reconstruction and a sum of Rs. 2.75 lakhs is available with the Local Government as a Reserve (G.O. No. 1352—Development, dated 26th May 1938.) Rural Sanitation is one of the purposes for which the Government of India grant for rural development might be spent and as this is the primary object of Health Societies, they are eligible for subsidies out of rural grant. In the early stages the income of the Society may not be sufficient to meet the recurring expenditure and in such cases the local bodies which are spending large sums for running subsidised rural dispensaries, may come forward to meet the deficit, if any. Health Societies are institutions run by the people and the cost is evenly distributed among the actual beneficiaries. There is vast scope for the successful working of such Societies.

Formation of Unions.—After a number of Societies are started in an area, a central organization called a "Health Union" will be necessary to co-ordinate the activities of Health Societies. Every such union will maintain a better qualified medical officer, one Sub-Assistant Surgeon for relieving the doctors in different centres in case of absence on leave, a small hospital with a nurse; a clinic with a laboratory technician, one clerk for keeping accounts and if possible, one organiser and propaganda officer. Its main functions will include: (1) Co-ordination of the activities of health co-operatives; (2) Purchasing of drugs and materials required for dispensaries in bulk at the cheapest price; and (3) Promotion of new societies.

The income of such a Health Union will be derived from out of contributions made by Health Co-operatives affiliated to it and subsidies from Government, Local Bodies and others. The budget of a Health Union will be roughly as follows:—

Expenditure :— 1. Chief Medical Officer 100 x 12—Rs. 1,200.

2. One Sub-Assistant Surgeon at Rs. 50—Rs. 600.

3. Office (club, etc.), Rs. 200.

4. Clinical Laboratory, Rs. 200.

5. Hospital, Rs. 400.

6. Travelling allowance, Rs. 200. Total Rs. 2,800.

Income :—1. Contribution from 12 Health Co-operatives at Rs. 150, —Rs. 1,800.

2. Income from Clinical Laboratory, Rs. 200.

3. Subsidies from Government, Local bodies and others, Rs. 800. Total Rs. 2,800.

As stated above, the question of starting a Health Union will arise only after a number of primary Societies begin to function in an area. There may not be the need to start Health Unions largely, as there are Local Board dispensaries at almost all Taluk Head-quarters.

The centres selected are Chepalle (Ramachandrapuram taluk), Polavaram (Amalapuram taluk), and Kondavaram (Pithapuram taluk), in East Godavari district, Peravali (Tanuku taluk) in West Godavari district, Villuppanur (Srivilliputtur taluk) in Ramnad district; Mayanur (Kulitalai taluk) in Trichinopoly district, Uluvur (Tanjore taluk) and Kuthanur (Nannilam taluk) in Tanjore district.

—*The Hindu.*

The Best Thing of All

"I AM still at work, with my hand to the plough, and my face to the future. The shadows of evening lengthen about me, but morning is in my heart. I have lived from the forties of one century to the thirties of the next. I have heard varied fields of labour, and full contact with men and things, and I have warmed both hands before the fire of life.

"The testimony I bear is this: that the Castle of Enchantment is not yet behind me. It is before me still, and daily I catch glimpses of its battlements and towers. The rich spoils of memory are mine. Mine, too, are the precious things of to-day—books, flowers, pictures, Nature and sport. The first of May is still an enchanted day to me. The best of all is friends. The best of life is always farther on. Its real lure is hidden from our eyes, somewhere beyond the hills of time...'—*Sir William Mulock.*

Old Age Postponed by Proper Diet

OLD age can be postponed from 10 to 15 years by eating a diet containing larger amounts of calcium, protein, vitamin A and vitamin G, Dr. Henry C. Sherman, professor of chemistry, Columbia University, stated in a report made at the Carnegie Institution of Washington.

The studies were conducted on rats because the chemistry of rat nutrition is so much like that of human nutrition that the data obtained with rats do not need to be discounted when applied to humans.

The rats were divided into two groups. One group was fed a diet containing enough vitamins and other necessary food substances for the animals to grow, remain healthy and bear young. The second group of animals was given what Dr. Sherman calls an optimum diet, differing from the first by having more milk in it. The extra milk supplied more calcium or lime, more protein and more of vitamins A and G. The animals on this optimum diet lived much longer than the first group of animals, and in addition had more vitality.

Interpreted in terms of human life, Dr. Sherman said that the gain the rats made was equivalent to extending the span of human life from 70 years to 77 years. The period known as "the prime of life" was extended even more in proportion. Signs of senility that would appear in normal individuals on an adequate diet at 65 years of age would be postponed by the optimum diet to 75 or 80 years.

Dr. Sherman's studies on diet's effect on length of life were made with the co-operative assistance of the Carnegie Corporation of New York and the Carnegie Institution of Washington.

Dr. Sherman pointed out that among the rats on both diets, as would be the case in human experience, a considerable porportion die natural deaths before the attainment of these ages.

According to present knowledge, Dr. Sherman believes life and vitality could be extended by a moderate increase in the calcium of the diet, by eating not more than twice the minimum amount of protein and by taking about four times the amount of vitamins A and G needed for normal nutrition.—*Science News-Letter.*

Women and Children and the Public Health

Lady Roney, J. P.

FORMERLY women were known as the weaker sex. They were supposed to enjoy "poor health"—what a phrase; as though anybody could enjoy poor health. It was a foregone conclusion that they possessed no administrative or executive power. They were not the equals of men, either in physique or in brain. They were not allowed to administer their own money. Now these artificial distinctions have vanished. Education and the franchise have raised the status of women, and actually it has been found that there are more similarities between men and women than dissimilarities, and it is unscientific to acknowledge more than a limited range of difference between them.

One of these differences is, however, to be discovered in the sphere of health, and the health of women must be viewed from a different standpoint from the health of men.

Many of the illnesses from which women suffer arise from the fact that they *are* women and so their function is to reproduce their kind,and many of the cases of ill-health are functional, and are not due to organic disease, but to the effect of disordered feelings, emotional upsets, and unhappy human relationships.

Competent experts state that the maternal mortality rate could be reduced by two-thirds, and some 2,000 maternal lives saved every year if certain administrative and gynæcological steps were taken.

One of the main defects in our educational system is that in so many of our schools there is an absence of hygiene as a definite and specific item from the Curriculum, and it is satisfactory to note that there is a gathering consensus of opinion in educational circles that there is something wrong with a system which provides instruction in a wide variety of subjects, yet neglects to touch that one subject, hygiene, whose object is to render the child able to use his knowledge and capabilities with that effectiveness which can only go with good health. Hygiene should be taught as a principal subject in the curriculum and by a qualified teacher, and when and if this is done the health of our women and children should certainly improve.—*National Health Review.*

Half Way Mark

AS middle-age approaches certain changes and modifications begin to take place in the ductless glands of the body, but the changes are so gradual that if the system is healthy it should be able to accustom itself to the new conditions without any undue strain or general bodily upset.

Naturally, however, when dealing with such a highly specialized and sensitive system as the human body this time of change must be highly critical, and this is especially so in regard to women, in whom some of the changes tend to take place more quickly.

But many women pass happily through these years almost without noticing the change and this is the ideal towards which all women must strive. In men the changes which accompany age are more gradual,

and are more those of a gradual dying down of function, and the effects are less dramatic.

The unpleasant symptoms, of this period of life are probably largely exaggerted, and brought about by a false notion of what people and women in particular imagine they are to experience. Ductless glands unquestionably can affect the nerves when they are out of order; but it also has to be remembered that "nerviness" and unhappiness can also interfere with the smooth function of the body. We all know that there is plenty of evidence that the state of mind has a most powerful influence on health. A person who has a dread of a certain disease often develops it—this is frequently seen as we go through life—so, on the other hand we find that the happy person does not so easily fall victim to disease as an unhappy one. This simple statement should influence our whole lives. Particularly should people bear it in mind during the trying middle years of life, because it is then that they have to face the loss of years with its accompanying loss of energy and, at the same time, are undergoing the great nevous strain involved in the reorganization of their ductless gland system.—*National Health Review.*

"What is Life".

"Life is a song", sang a warbler but an earthworm who had just succeeded in getting his head above the ground said, "No ! it is a struggle".

"I think it is a development" said a wild rose-bud, as she unfolded her petals one by one to the delight of a butterfly who came to kiss her, and exclaimed, "Life is all enjoyment"! "Call it a sherb summer's day", hummed a little fly as it passed by.

"I cannot see anything but hard work", lamented an ant as she struggled on with a piece of sweet-meat too big for her.

The crow only laughed to cover his own poverty of thought.

The general indignation might easily have produced a quarrel at such a point, had not at that moment the rain began to fall whispering softly, "Life is made up of tears".

"You are all mistaken", called out the eagle, as he sailed through the air on his majestic wings,"Life is freedom and strength".

Meanwhile it had grown dark and a practically minded Maina proposed that they should all go to rest.

And the night wind rustled softly through the branches.

"Life is a dream".

Silence lay over town and country and dawn was near, when the scholar in his lovely room extinguished his lamp and sighed:

"Life is but a College".

And the youth returning from a night of revelry moaned in his heart, "Life is one long desire ever unfulfilled."

And the patient tossing in his sleepless bed moaned:

"Life is but a round of pain".

Through the open window came the cool morning breeze and soothed the sick man's fevered brow whispering:

"Life is an eternal mystery".

—*S. Bhugat.—The Kemcol Journal of King Edward Medical College.*

Health Tit-Bits

Deafness in Old People

From a recent survey it is believed that deafness in older people is due more often to infection than was formerly supposed.

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Saliva and Health

Saliva as an indicator of tooth health and general health is being studied at the University of California College of Dentistry.

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Athletics for Women

According to the Health Organization of the League of Nations, such athletic activities as fencing, boxing, wrestling, and long distance running are unsuitable for women.—*Science News Letter.*

* * *

Goat's Milk

A quart of goat's milk is equal to any of the following : 13 ounces of bread, 3/4 pound of lean meat, 8 eggs, 6 pounds of spinach, 5 pounds of lobster, 5 pounds of turnips, I pound of chicken, 9 large oranges, 1/2 pound of wheat flour, 3 pounds of codfish. —*O. W.*

* * *

Devitalized Foodstuffs

"Condemning white flour as deficient in vitamins and minerals essential for health, Sir Leonard said that feeding children on white bread and margarine, or jam, was like supplying petrol to a car without lubrication to the engine. Tooth brushes, dentifrices, and dentists had done nothing to stop decay of teeth, which affected over 90 per cent of children. But the mischief could be prevented by a proper diet of whole wheatmeal, milk, butter, cheese and vegetables, with some hard food to bite on and exercise the jaws."—*From a report of an address at Edinburgh, by Sir Leonard Hill.*

* * *

£ 1,000,000 A week on Sweets!

"Instead of getting barley and oats, grinding them and making them into bread, we now get white flour, polished rice, sugar, dried milk and tinned foods. The natural foods have been changed into artificial foods with the very substances that are necessary to perfect health purified away. A nation that can spend £ 1,000,000 a week on sweets and chocolate can well afford the natural materials of a good diet—plenty of milk, fresh eggs, fresh meat, fresh vegetables, fruit and sunshine."—From the *Lancet.*

* * *

The Diet Should Contain

"The diet should always contain a certain amount of the 'roughage' or fibrous remainders provided by the green vegetables, various fresh fruits, wholemeal bread, oatmeal, and the like. This is necessary for the stimulation and natural evacuation of the bowels..."—A Medical Correspondent.

* * *

If the Doctor is Wise!

"Or if the poor man is ill, send for a doctor, who, if he is wise, will probably starve him, wash him out, and order exercise or massage; and Nature will see to the appetite returning..." —A Harley Street Physician.—*Health for All.*

Book Reviews

The Chemistry of Natural Immunity —*By William Frederick Koch*, Ph.D., M.D., with an Introduction by D.H. Arnott, M. D., Published by The Christopher Publishing House, Boston, 20, Massachusetts, U. S. A. Price: $ 2 net.

The text of this volume by Dr. Koch, deals with definite biochemical changes which occur in the body before bacterial invasion takes place to produce well-known acute and chronic diseases. This bio-chemical change has been discovered by him to consist of a faltering of the oxidative mechanism—the most fundamental chemical process connected with life. In an important percentage of cases, it has been readily restored to normal, by the using of the reagents discovered, developed, and described by Dr. Koch.

While this book will be of especial interest to all well-informed laymen, it is of incalculable value to every physician, offering a wealth of illuminating data for immediate use.

The book abounds with numerous illustrations and is neatly printed and nicely got up.

Practical Rejuvenation in Men and Women—*By Dr. K. V. Mathew*, Edited and published by Mrs. Anie Mathews, Travancore.

Price: Rs. 3-12-0.

There is innate desire among many individuals to learn all about sex-problems but unfortunately a knowledge about sex is taboo. Consequently a good deal of unhappiness prevails among married couples born of misunderstanding, which can be cleared by a correct knowledge of the physiology and psychology of sex. This book is meant to serve as a friend, philosopher and guide for the understanding and solving of the many perplexing questions that tend to dissatisfaction and unhappiness in the later stages of married life. It is written in plain, non-technical language and gives useful hints at the end, as to the hygienic ways of living with a view to obtain a long lease of life.

Necessity of Educational Museums —*Published by J. C. Basak*, 363, Upper Chitpore Road, P.O. Beadon Street, Calcutta, 1st Edition.

Price: As. 4/-

The author is a staunch advocate of education through Museums and his experience extending over half-a-century has enabled him to arrive at the conclusion that 'it is one of the cheapest, quickest and most efficient methods of imparting general knowledge'. Now that an extensive campaign of literacy drive is being launched among the illiterate masses throughout India, it will be a fitting opportunity to give this method a trial. Many opinions from eminent scholars have been obtained on this scheme, which are appended to this book and which are well worth perusal.